

Basis of diagnosis: symptoms, Widal test, blood culture.

Duration, severity, and final result of the disease.

7. If you have heard of any case of typhoid fever in a vaccinated person, outside your practice, please give the name and address of the physician or patient so that particulars can be obtained.

CASE REPORT.

Fracture of the Left Clavicle by Muscular Action* (Without Blow or Fall).

By P. CAMPICHE, M. D., San Francisco.

M. T. of San Francisco, 13 years old, has never been sick and has always been a very strong boy. On December 20th, 1914, he was pumping air into the tire of his bicycle in the following manner: he was kneeling on the ground, pressing with his right hand on the base of the pump so as to steady it; with his left arm, which was elevated and abducted, he was just starting to bring the handle of the piston down when he felt a sharp pain in his left shoulder. His aunt, who saw him at the time, said that he turned quite pale. However, he did not complain any more about it and did not go to see a doctor.

At the end of January (about five weeks later), his mother brought the boy to me with what she thought might be a "growth" in the shoulder. The lump now felt in the middle of the clavicle has all the characteristics of a healthy callus. The X-ray plate confirms this view, and shows a transverse subperiosteal fracture of the clavicle, with large callus.

Dr. E. Rixford, discussing the case, accepted the diagnosis of fracture by muscular action; he agreed that there is no reason to think of a pathological fracture here as solid union has taken place and the callus is normal in every respect.

AN ACCIDENT WITH NEO-SALVARSAN.**

By A. DAVIDSON, M. D., Los Angeles.

X. Y. A stout, vigorous man, 27 years of age, weighing about 180 lbs., came to my office on the recommendation of his medical attendant, for an injection of neo-salvarsan. Six weeks before he had acquired a chancre and now showed a mild leucic rash of about one week's duration; no headache, fever or other disturbances. He had been taking mercury for about two weeks.

At 12 M. I injected dose iv. (0.6 gr.) neo-salvarsan, using 10 cc. of water in the prescribed manner. Before the needle was withdrawn, a spasm of pain was complained of "in the pit of the stomach," as he expressed it. He tossed in agony, and began retching of mucus. Perspiration rolled off his forehead, the skin of the arms showed extreme "goose flesh," his pulse became small and thready, began to intermit, and in five minutes he was pulseless, cyanosed with clammy skin, all the while conscious and said the pain was now in his heart and agonizing, air hunger was marked.

Fifteen minims adrenalin brought the pulse up so that intermittent beats could be felt, but in a short time he became pulseless again. A second dose was administered and repeated, as it seemed to be required in fifteen minutes again. At 1 p. m. the

pulse was palpable but very irregular, he was still markedly cyanosed, lips and eyelids edematous.

I had him removed to the Clara Barton Hospital. When put to bed he vomited freely of some undigested food, and said he felt better; pulse 106 feeble but palpable. Drop enema salt solution given.

At 2:10 pulse 120—very weak.

At 2:30 pulse 126—very weak and intermittent, bowels moved.

At 3:00 pulse 120.

At 4:30 pulse 114—temperature 98°, feeling better.

At 6:00 pulse 95.

At 8:00 pulse 78.

Next day pulse was 66, temperature 98°. Had a light breakfast and except for some weakness which persisted for a few days, he felt quite well.

I am moved to report this case for two reasons: first, to warn you of the possibility of such an accident following the use of the hypodermic method, and secondly, to emphasize the value of adrenalin as the best and probably only means of saving life in these unfortunate cases. Use and repeat the adrenalin as often as the failure of the pulse would indicate. In this case I gave 60 M. of the 1-M. 1000 Sol. in the first hour, and response to its action showed immediately in the return of the pulse.

All of our medical journals have commented on and freely discussed the sickness and occasional fatalities that have followed the use of salvarsan. These are probably wholly due to arsenical poisoning, but of such accidents as I here relate, I have only found indefinite reference in European literature.

The instantaneous collapse that followed the injection, bears out the assertion made by a French observer, who affirmed that salvarsan contained some product that caused marked vaso dilation, and that many of the unfortunate after results were due to this property.

When the patient in question vomited after reaching the hospital, the remains of food expelled had a markedly spirituous odor. The presence of alcohol under such circumstances is an added danger, and may have been the cause of the symptoms displayed, as it too has a vaso dilator action, and may have accentuated that quality in the salvarsan.

BOOK REVIEWS

Diagnostic and Therapeutic Technic. A Manual of Practical Procedures Employed in Diagnosis and Treatment. By Albert S. Morrow, M.D., Clinical Professor of Surgery, New York Polyclinic. Second edition, Thoroughly Revised. Octavo of 834 pages, with 860 illustrations. Philadelphia and London, 1915. Cloth, \$5.00 net; half morocco, \$6.50 net. W. B. Saunders Company, Philadelphia, London.

While this admirable compendium contains a wealth of material of the greatest possible importance to the practitioner, it somehow seems to fall short of being a practically useful work.

A great portion of the book is devoted to methods that belong in the hands of the specialist and should be sought for in the special text-books.

There is much contained in this volume that no practitioner should ever seek in a text-book but should have learned in the clinic or at the bedside.

These points give the reasons why this work should not be added to the working library but place it in line with the dictionaries. In other words for a positive clinical manual it is not exhaustive enough and is too elementary.

G. H. T.

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** Read before the Los Angeles Medical Society, January 7, 1915.